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PREVENTIVE HEALTH CARE AMONG OHIO'S FARM RESIDENTS

By

G. Howard Phillips and Albert R. Pugh

Department of Agricultural Economics and Rural Sociology
Ohio Agricultural Research and Development Center
Ohio Cooperative Extension Service and
The Ohio State University
Columbus, Ohio

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INTRODUCTION

Health can be viewed from many perspectives. One widely held position categorizes health care under three general headings: preventive, curative and rehabilitative.

Logic dictates that preventive health care should take precedent over a curative approach. However, health educators noted in The Report of the President's Committee on Health Education in 1973 the lack of attention to preventive care:

> Controlling the controllable problems and preventing the preventable one have received relatively little concerned attention. The health care system traditionally has been geared to short-term treatment of acute illness.

In this same report, it was further observed that health consumers prefer to react to symptoms rather than participate regularly in preventive medicine:

> Many causes of disease and death can at least be influenced, and some prevented altogether, by good health practices by the individual. The fact is, however, that good health practices are not uniformly followed or even considered.

Data from two Ohio research studies conducted in 1967 and 1972 are compared to show the level of participation in selected preventive health practices by farm residents as well as showing a five year trend. Methodological procedures for the 1967 study may be viewed in Ohio Agricultural Research and Development Center Research Bulletin 1038.

Procedures for the 1972 study were as follows: A stratified random sample of 10 of Ohio's 88 counties was selected. One county was randomly chosen from each of the 10 Cooperative Extension Service areas representing various topographic and climatic conditions and types of farming. Counties represented in the sample included Darke, Geauga, Greene, Hardin, Meigs, Morgan, Morrow, Putnam, Seneca and Tuscarawas.

During 1972, 4,662 farm people were selected by the cluster sample method and interviewed. The sample represented 9.6 percent of the farm population in the 10 sample counties and 1.3 percent of the total farm population in the state.

FINDINGS

Physical checkups are increasingly viewed by health personnel as a highly desirable preventive health practice. Figure 1 shows the percentage of Ohio farm residents who had physical checkups in the past 2 years increased from 35 percent in 1967 to 45 percent in 1972. This 10 percent change indicates an upswing in the percentages of rural residents getting examinations as there was only a 3 percent increase from 1962 to 1967.

Age is one of the important variables which is predictive of the number and percentage of physical checkups. Table 1 notes the significance of age as a factor in identifying participation levels in physical checkups. Both the 1967 and 1972 studies showed that children under 14-years old had the lowest number of physical checkups within the past 2 years. This finding was expected. Adults were expected to have physical checkups more often because of more nonvoluntary checkups required by school, job, pregnancy, military service or insurance.

An increasing number of Ohio farm residents are getting physical examinations. However, the 45 percent reported in 1972 remains below the national level of more than one-half of the population as reported in a study by R. Andersen and O. W. Anderson in 1967.

Problems of inadequate dental care cut across age and sex groups perhaps more than most health concerns. Babies often have difficulty in cutting teeth. Youngsters of six or seven experience the loss of teeth as well as decay. These problems continue until a partial or total loss of teeth is suffered at varying ages to most people causing discomfort as well as aesthetic considerations.

Less significant progress was made in dental checkups than in physical checkups between 1967 and 1972. Figure 1 reveals that only one percent more farm people had dental checkups in 1972 than in 1967.

Dental checkups for farm families appear to have stabilized with slightly less than 6 out of 10 participating within a two year period.

Chest x-rays are widely used for preventive and diagnostic purposes. Due to the need for specialized equipment for taking x-rays, tuberculin skin test (TB) are frequently used as a screening procedure. A chest x-ray is generally required of the entire family when a positive reaction occurs from the skin test. First grade children are generally given skin tests in Ohio public schools.

Data in Figure 1 reveal 22 percent of the population had chest x-rays in the past two years. A TB skin test was secured by 27 percent of farm people in the 1972 study. Females more often than males were tested and those families whose head of household had obtained less than 12 years of education were less likely to have been tested. TB tests are expected to continue as preventive health practice in the foreseeable future as a deterrent to this previous widespread disease.

Tetanus continues to be a formidable disease when persons are stricken. The American Medical Association reports that almost half of those infected die. Farm people are particularly susceptible since the micro-organism responsible for the disease is often found in the soil. Tetanus is most commonly known as lock-jaw and is caused by the toxin of the micro-organism Clostridium Tetani. The micro-organism is often introduced through wounds.

The 1967 Ohio Rural Health study used a three year base to determine the extent of immunization for tetanus. This study extended the period to ten years to conform to current recommendations. An article in an American Medical Association newsletter notes: "Immunization with tetanus toxoid every ten years, plus possibly a booster when a tetanus-prone injury occurs provide simple but vital defenses." (AMA Health Education Service, p. 38, June 1967)

Figure 1 shows that more than one half of Ohio's farm residents have had tetanus shots in the past ten years. The 1967 study revealed a much lower level of participation (27 percent) due to the different time period covered.

Farm males exceed farm females in tetanus shots. Farm males tend to have more tetanus shots during the production age years whereas farm females had 44 percent of their tetanus shots by age 14.

Persons with less than a high school education have had significantly less tetanus shots in the last ten years than those with high school or more education. These data also revealed family size to be related to the number having had a tetanus shot. Families with five or more members had significantly more tetanus shots than smaller families.

Ninety percent of all American adults had the common 10-day measles (rubella) when they were a child. (Journal of The American Medical Association, (JAMA) November 21, 1966, pp. 837-838) Measles are so universal they are not

viewed as a dangerous communicable disease. However, 368 percents died from measles or one of its complications in 1963. By 1968, only 24 deaths were reported. (Statistical Bulletin, Metropolitan Life, April 1974) Measles vaccine has been licensed since 1963. (op. cit., JAMA, 1966) A separate vaccine has been developed for German measles (3-day measles). Thus information for both types were sought in this study.

In Figure 1 it is noted that 25 percent of Ohio farm residents reported measles shots in 1972. This was a 14 percent increase over the 1967 study. This increase can in part be explained by the change in state regulations which now require school children to have measles shots before entering school.

Only 19 percent reported German measles immunization (Figure 1). Age, education and family size were predictive of participation in this health practice.

SUMMARY

Among the seven preventive health measures studied, immunization for measles made the most significant progress between 1967 and 1972. These data showed that 25 percent of the rural people reported measles shots in 1972. This was an increase of 14 percent over the 1967 study. Rural people responded favorably to a national campaign to eradicate this serious disease. This percentage supports the fact that the campaign to immunize children is working.

In the other preventive health practice areas where comparable data was available, both physical and dental checkups showed an increase from 1967 to 1972. However, the change in dental participation was exceedingly small. Many farm residents are negligent in their preventive health care participation. The incentive for "good health" must be on an individual basis. The individual can do much to prevent many major health problems.

Table 1. -- A Summary of Selected Factors in Identifying Participation Levels in Selected Health Practices for Ohio Farm Residents, 1972.

	Age	Sex	Education	Family Size
Physical Checkups	+	+	+	+
Dental Checkups		+	+	-
Chest X-rays			+	+
Tuberculin (TB) Skin Test		+	+	+
Tetanus Immunization	-	+	+	+
Measles Immunization	+	-	+	+

+ mark = A consistent identifying factor
- mark = A nonconsistent identifying factor

Figure 1. -- A Comparison of Levels Participation in Selected Health Practices by Ohio Farm Residents for 1967 and 1972.